

4400 Series RO Membrane Housings & End Caps

The Biolab 4400 Series Reverse Osmosis machines have utilized several styles of membrane housings and end caps over the years as the machine has evolved. A matrix outlining the membrane, membrane housings, and end caps used on the 4400M RO is listed below. This Tech Note includes information on the End Caps cracking issue and contains latest membrane housing details.

Date of Manufacture	Replacement Membrane Kit	Replacement Membrane	Membrane End Adapter	Membrane Housing	End Cap (sold individually)	O-Rings
Prior 9/28/2004 Pre-BM# 5-031 (Housing length (42 5/8"))	3026042 Includes membrane & adapters.	3025014	1235145 Includes inner o-ring, sold as a kit of 2 adapter (requires 1 per housing).	3025710 Housing, end caps, o-rings, adapters, & membrane 3025014. Old style p/n 486-40-328 obsolete.	1229990	1270003 (Outer o-ring) OS1151580 (Inner o-ring) OS1151580 (Adapter o-ring)
Prior 8/12/2009 Pre-BM# 9-104 (Housing length 42 7/8")	3024580 Includes membrane & adapters.	3025014	480-52-237 Requires inner o-ring, sold individually, P/N OS1151580 (requires 2 per housing).	3027181 Housing with end caps, o-rings, less membrane. Old style p/n 486-40-312 obsolete.	3025847 (Includes o-rings, seal and clamp set) Old style p/n 486-40-360 obsolete.	N/A
Prior 1/1/2011 Post-BM# 9-104 (Housing length 40 7/8")	Not Applicable	3025014	Not Applicable	Verify with Canadian Tech Support.	3025847 (Includes o-rings, seal and clamp set) Old style p/n 486-40-360 obsolete.	N/A
After 1/1/2011	Not Applicable	3025014	Not Applicable	3027182 Housing with end caps, o-rings, less membrane.	3025788 (Includes (1) end caps, (2) outer o-rings (2) inner o-rings and (1) clamp sets w/hardware)	3027184 (Outer o-ring) 3027185 (Inner o-ring)

Note: Effective October 4, 2010 all new 4400M series RO's will utilize a full-fit style membrane (P/N 3025014). It is the same dimensions as the discontinued CMED membrane (P/N 1230048) and utilizes the same end adapters.

4400 Series Cold RO End Cap Cracking Issue

To replace cracked end caps, use P/N 3025847. It contains all o-rings, seals, and (1) clamp set. This replaces P/N 486-40-360.

Note: For installing stainless thread connections into the plastic end cap, be sure to use PTFE tape, approximately 4 wraps on the male connector and a thin layer of liquid PTFE over the sealing surface. Do not use excessive tape. Taping is wrapped in the clockwise direction. The wrap is tightened to the threads, clearly showing the thread form. Tightening 2 turns after finger tight should be sufficient to seal metal the male connector into the end cap. 70% (\pm 5%) of the male thread should be engaged. Do not over tighten.

Membrane Housing for 4400 Cold Series RO and 4100/4400HX Hot Series RO

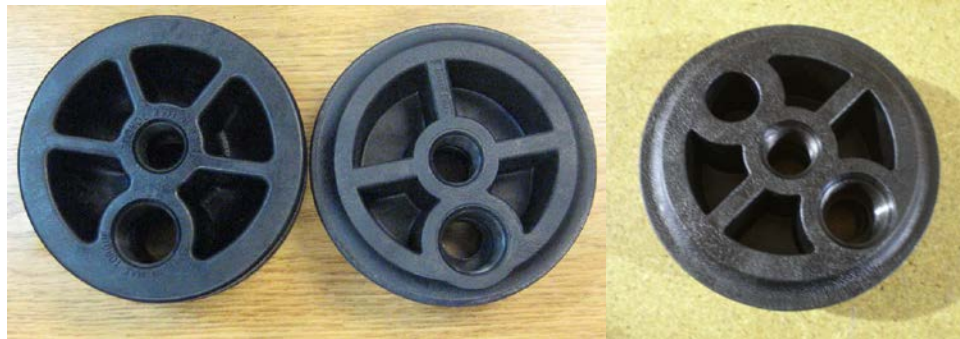
The VSH model housings and end caps are being replaced due to product availability. Implementation occurred on or before January 1, 2011 of all newly manufactured 4400M, C, and B machines including 4100/4400HX hot series RO's.

Housing:



End Cap for 4400 Cold Series RO:

Thicker Wall Geometry vs. Contoured



New Style End Cap
(From Kit P/N
3025788)

Obsolete End Cap
(P/N 486-30-360)

Replacement End Cap
for P/N 486-30-360
(P/N 3025847)

Dual O-ring vs. Single O-ring



New Style End Cap
(From Kit P/N
3025788)

Obsolete End Cap
(P/N 486-30-360)

Replacement End Cap
for P/N 486-30-360
(P/N 3025847)

Note: The new style end cap on the left has four spokes vs. the three spokes on the VSH style on the right. The height difference and clamp size/location are also different. The new style end caps will NOT fit the older style housings.